

Adello



Edition No. 25

TOP 50
BUSINESS &
MARKETING
visionaries

HOW ETHERIUM
MERGE WILL
CHANGE THE
CRYPTO MARKET

*Adello's focus of the
week*

ALAN SMITHSON

*Co-Founder of MetaVRse,
Investor, Mentor, XR For
Business Podcast Host*

**FORTNITE:
PARADISE**

By Exscalibur

**REVOLUTIONARY
MILLS
OF TOP TECH
INNOVATIONS**

EDITOR'S NOTE

The crypto and NFT markets are intriguing!

Did you know that weekly NFT trading volume has fallen to \$114.4 million, which is down 98% from January's \$6.2 billion? This data was released by Dune Analytics. It was fascinating to observe how weekly NFT trading volume hit a record of \$146.3 billion in early April before plunging in May with the crypto bear market.

Interestingly enough, the number of wallets with at least one NFT has increased to 6.14 million from 3.36 million at the end of January. And yes, NFT prices have decreased along with Ether (ETH), the most prevalent cryptocurrency used to acquire and trade digital collectibles. Now, NFTs sell for \$285 on average, compared to \$2,000 in early January.

While our team was discovering new NFT trends, fighting enemies splashing Chrome all over the Fortnite world, and analyzing Ether Merge impact on the markets, Alan Smithson, co-founder of MetaVRse, investor, and XR For Business podcast host, shared his insights about the technologies behind the Metaverse. This edition has much to share!

Enjoy reading!



Yours,
Anna Pak
Head of Marketing at Adello



REVOLUTIONARY MESS OF TOP TECH INNOVATIONS

BY ALAN SMITHSON

A lot of technology has gone into what we call the internet. From unique IP addresses and fiber-optic cables to taxonomy and naming conventions, standards, protocols, and so much more, a congregation of new technologies to solve more complex challenges as use cases and users of the internet developed. As the number of users grows exponentially, it took 12 years for the internet to reach one billion users and only five to reach two billion. That was in 2011.

Now think about Apple; it took the company more than 30 years to reach a \$1 trillion market cap and only four more years to triple it to \$3 trillion.



That's the thing about exponential growth: human brains have trouble predicting it and grasping the consequences, sometimes until it's too late. But as we start spending more time in virtual worlds, trading virtual goods, and speaking with virtual avatars, we need to seriously consider the potential for bias and harm while providing a free and open structure on which the world can be built.

The metaverse has been a hot topic lately, but few consider what it will do for humanity. I believe that the metaverse will be the internet that we enjoy today, with video, audio, text, and images that we scroll and swipe through, plus a more immersive, interactive, decentralized, and autonomous layer on top.

JP Morgan, Goldman Sachs, PwC, Grayscale, Citi and Morgan Stanley

predict the metaverse will be worth \$6-13 trillion by the end of the decade, with revenues from virtual worlds alone expected to reach \$800 billion in 2025.

What are the business use cases for the metaverse? The high-level use cases being deployed today include; training, marketing, engineering, and digital twins for maintenance, remote collaboration, virtual retail, education, and many others.

Recent advances in three seemingly disparate fields of technology are starting to converge together and hold the promise of a new paradigm of computing in three dimensions. With the explosive growth of all three of these technologies, the question becomes, 'what industry or field of human endeavor will the metaverse *not* impact?'





XR AS A VISUAL LEVEL OF THE METaverse

The visual layer is the first innovation underlying the metaverse development. xR is a catch-all term for real-time 3D, virtual, augmented, and mixed reality. Some say multiplayer games like Fortnite and Roblox are early prototypes of the metaverse, while others believe that platforms like Decentraland or Sandbox are the first ‘real’ metaverse platforms due to their open and decentralized nature. Others point to VR worlds like VRChat, AltSpace or Meta’s Horizon are the start of the metaverse due to their immersive nature.

The above examples are all built using similar technology stacks for rendering real-time 3D. Before building any virtual world, 3D website, interactive training system, AR virtual try-ons or games, designers and developers create 3D assets using software like Maya, Cinema4D, Blender, and Adobe Substance Painter. Those can also be purchased from stock 3D model markets such as Sketchfab and Turbosquid or even 3D scan physical items into models using the LiDAR scanners built into newer iPhone and Samsung models.

Despite the a lack of consensus on global standards regarding which 3D format will be universally accepted

across all platforms and devices, The Khronos Group and, more recently, the Metaverse Standards Forum have brought together over 1,500 organizations in the pursuit of standardization in the XR and 3D industry, similar to what happened with the JPEG (images) or MPEG3 (audio) and MPEG4 (video). So far, the two contenders are Graphics Language Transmission Format (GLTF) and Universal Scene Description (USD).

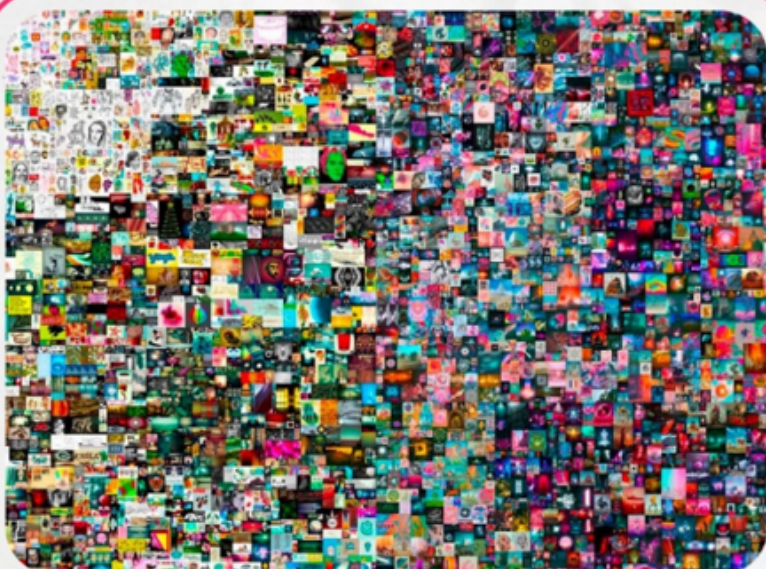
Once you have the 2D and 3D files required to build your experience, it’s time to jump into creation platforms or game engines, which make it easier to build scenes, games, and worlds adapted to popular gadgets. Platforms like Unity, Unreal, and MetaVRse can quickly help designers, developers, and creators build and deploy quality immersive and interactive experiences. Creating compelling real-time 3D metaverse experiences involves great skills in storytelling, architecture, game mechanics, sound, animations, avatars and more. Each discipline is brought together to create a magical experience for the end user. Think of XR as the visual layer of the metaverse.

BLOCKCHAIN AS A FOUNDATION OF THE METAVERSE

The **second technology** that will power the metaverse is the **blockchain**, or distributed ledger technology (DLT). A number of technologies are built on the blockchain: non-fungible tokens (NFT), distributed autonomous organizations (DAO), cryptocurrencies, utility tokens and others that can be used for transacting commerce, value transfer, governance, proof of provenance, and traceability of assets or commodities, both physical and virtual. It will provide metaverse users with an immutable record, and a more fair and distributed economic system, free from government oversight. We are at the nascent stage of blockchain technology, but rapid advancements in the field have attracted billions of dollars in investment, with the hope of building the next great platform for Web3.

Many great books have been written about **blockchain** and its benefits to society, but few mention its direct relationship to the metaverse as the foundational layer of trust and trade for 3D assets across platforms. Let's break down the individual technologies:

NFTs are a simple tag or receipt of ownership of a digital or physical asset through a distributed ledger. The underlying assets (avatar, 3D object, art piece, etc.) are rarely held by the NFT itself, but rather by a 3rd-party hosting service, like AWS or Azure. Artists, brands, creators, and holders of IP love the idea of NFTs because, depending on the smart contract, the creator of the project could get a percentage of any subsequent sales. Imagine if DaVinci had NFTs, so every subsequent resale of a painting netted 5% to his estate?



Artist

BEEPLE

NFT

**Everydays:
The First 5000 Days**

Sold For

38525 ETH - \$69.3 million

Date

March 2021



DAOs are organizations without a hierarchical management structure. They are decentralized to give the token holders voting rights and are useful when it exists for one intended purpose (i.e. Constitution DAO formed to purchase a rare copy of the US constitution). Once more complicated business structures evolve, the rigid nature of governance through blockchain seems to become a challenge as each change to the underlying code requires consensus to change. Newer DAO structures, like Madder.Science DAO, are acting like incubators/accelerators for promising projects in the metaverse space. However, this business model is still unproven and will take time and a community focused on growth to succeed. (Disclosure: The author is one of the founder members of Madder.Science DAO).

Cryptocurrencies are the economic layer of the metaverse, with the promise of allowing instant, cross-border transactions without government oversight and taxation, at least in theory. Of course, assuming any unregulated asset class would remain so would be a grave miscalculation, and assuming

governments wouldn't come looking for tax would be equally so. Since it is relatively easy to create and distribute a cryptocurrency, many have been created. To date, there are over 20,000 different cryptocurrencies with a total market capitalization of over \$1 trillion. These coins (or tokens) range from the popular ones, Bitcoin (BTC), Ethereum (ETH) and Tether, to completely obscure tokens, Pitbull (PIT) and Vaquita (VAT).

Not all blockchains are created equal, and some, like Bitcoin, use a process called proof-of-work, or POW (computer processing to 'mine' coins). This uses a lot of energy, and new, faster, and environmentally sustainable protocols like Hedera (HBAR) and Solana (SOL) use a proof-of-stake (POS) model (approved nodes that require no computing). Ethereum has moved to a POS system in mid-September 2022.

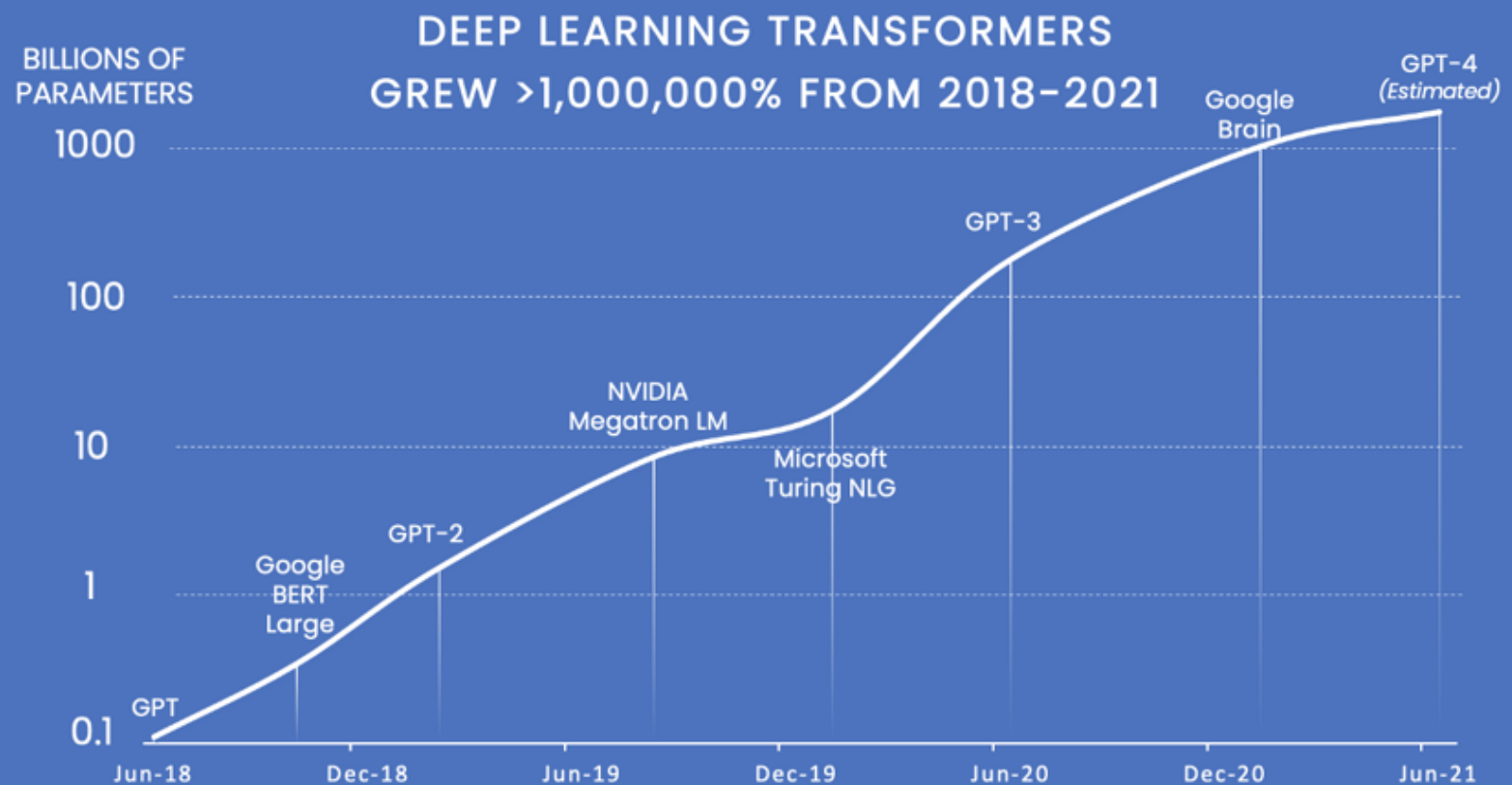
AI AS A CREATIVE COMPONENT OF THE METAVERSE

The third and potentially most impactful technology required to power the metaverse is Artificial Intelligence (AI). As the world moves from phone to face over the next decade, new technologies will be required to help create virtual worlds and objects.

AI is a computing concept that helps machines think and solve complex problems as we humans do with our intelligence. A human performs a task, makes mistakes and learns from

them. Likewise, an AI is supposed to work in the same fashion as a part of its self-improvement ([Dibbyo Saha, Ryerson University](#)).

AI is built upon several subdomains of academic studies; computer vision, deep learning, machine learning, natural language processing, neural networks, evolutionary computation, suggestion algorithms, and simultaneous location and mapping (SLAM).





Mid Journey AI Cover Art before upscaling: prompt 'The metaverse is XR, AI and Blockchain powered' (Alan Smithson)

HOW WILL AI BE USED IN THE METaverse?

Creation — [DALL-E by OpenAI](#), [MidJourney](#), [NightCafe](#), and [Deep Dream Generator](#) create novel 2D visual art in seconds. This has been a dream of computer scientists since the beginning of AI, but I feel that true graphic artists will struggle as this form of AI creates license-free works instantly for pennies.

Other, newer systems, such as [Anything.World](#), can create entire 3D environments and scenes from

simple text input. [Kaedim](#) is a new platform that promises to turn 2D images into 3D objects with mesh-level details.

There is also an entire practice of turning 2D videos of people into other people, known as Deep Fakes. [DeepFakesWeb](#) and [ReFace](#) allow you to pretend to be a celebrity using deep fake videos. This is all pretty revolutionary and will have a massive impact on the creation of the metaverse on a global scale.

Conversation — [Natural language processing \(NLP\)](#) is the study of allowing computers and humans to communicate in a more natural way. New AI platforms such as [Inworld.AI](#), [Dialogue Flow](#) and [LivePerson](#) are already operating at scale, servicing websites and applications across myriad industries.

Computer Vision (CV) — CV uses cameras and sensors to understand the world around you and return data in real-time. The best example is simultaneous location and mapping (SLAM), which uses the RGB cameras on your phone to understand where the ground is and where objects are in relation to you, projecting virtual graphics on top in the form of augmented reality. CV is also used for recognizing faces, places, and

things (try [Snapchat's plant identifier](#)) and will be a big part of the metaverse when we live half our lives there.

Personalization — Personalization engines are the main driver of providing better movies to watch (Netflix, TikTok) or better products to buy (Amazon, Alibaba). But in the context of the metaverse, these suggestion algorithms will help you find new communities, learning opportunities, and job prospects. There may be inherent bias programmed into these algorithms, and as such, great care must be taken to ensure that they do not exclude people or harm their users.

Personality and Emotions ⓘ

Character traits ⓘ

fun loving, happy ✕ exciting ✕ loves to travel ✕ enjoys events ✕ loves airlines ✕ ✕

Mood

SADNESS — JOY

ANGER — FEAR

DISGUST — TRUST

ANTICIPATION — SURPRISE

EMOTIONAL FLUIDITY

static — dynamic

Personality

NEGATIVE — POSITIVE

AGGRESSIVE — PEACEFUL

CAUTIOUS — OPEN

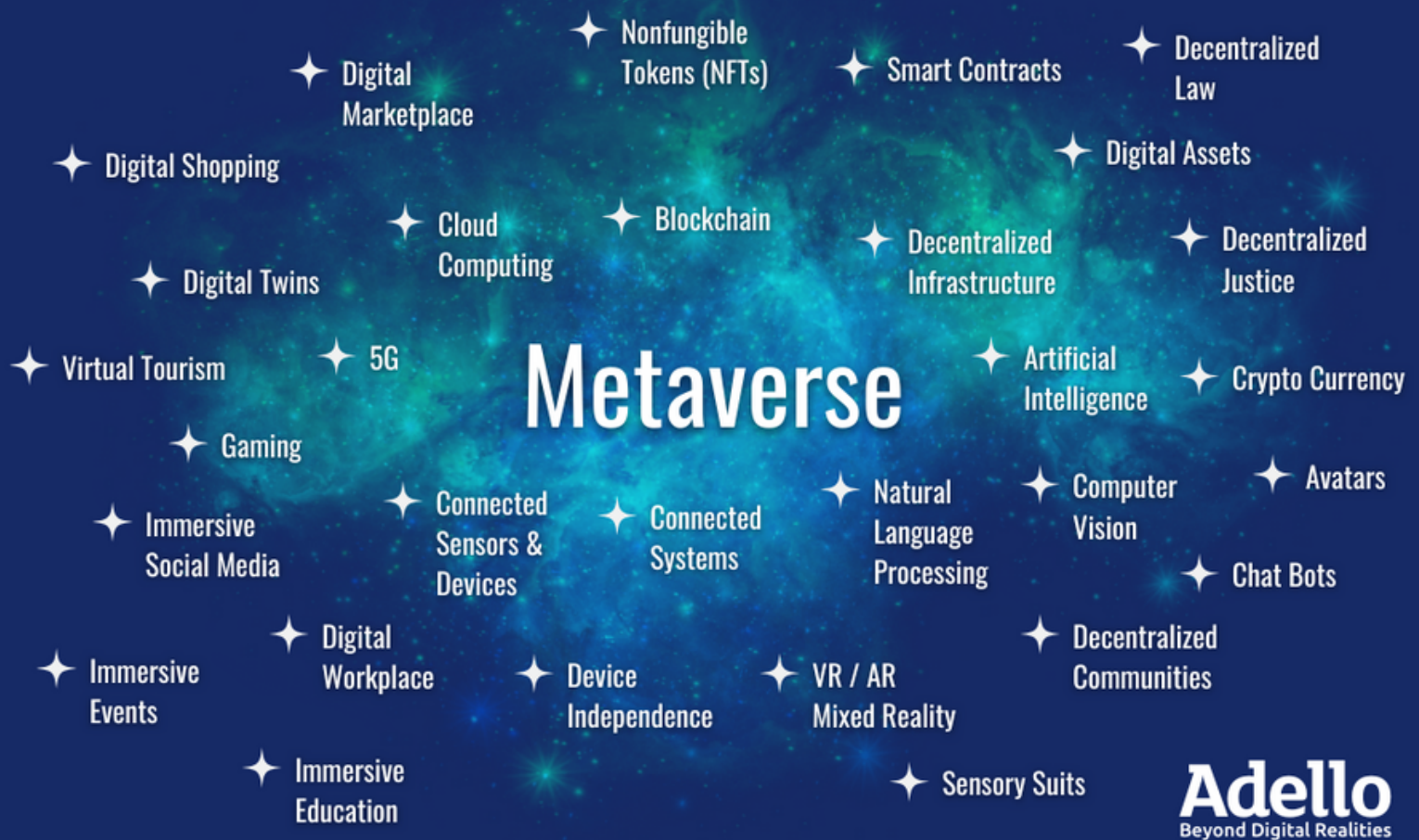
INTROVERT — EXTRAVERT

AUTHORITY

-10 — 0 — 10

Personality menu for virtual characters (Inworld.ai)

Elements of the Metaverse Galaxy 2022



THE METAVERSE IS THE NEXUS OF THE CURRENT INTERNET + XR, AI & BLOCKCHAIN

As you can see, the metaverse will be a complicated mess of new technologies, virtual worlds, talking avatars, suggestion algos, predictions, and computers that know more about the world around us than we do. Great care must be taken to ensure that the metaverse is built for everyone, with inclusion and

diversity at the heart of it. It will be imperative over the next few years that we build technology to serve humanity, not just to make more money for the ultra-rich. This is the promise of a decentralized, democratized metaverse. Let's take care to build the future we want.

ABOUT

Alan Smithson

Co-Founder of MetaVRse, Investor, Mentor, XR For Business Podcast Host

Alan Smithson's purpose in life is to inspire and educate people to think and act in a socially, economically, and environmentally responsible way.

Alan is a Co-Founder of MetaVRse, a creation platform for the future of human communication, collaboration, commerce and culture, featured in Forbes.TheMall, a 100m sf virtual retail and entertainment destination built on the MetaVRse Engine, featured in VentureBeat.Your Director AI, Automatic Face Tracking Video Switcher. Alan is also a board advisor to HSTAR, a new space transportation company (stealth).

Named one of the most prominent Digital Futurists to watch out for in 2022, Alan is a proud Father, Business Leader, TEDx Speaker, and Podcast Host. He co-invented the World's first touchscreen DJ system, Emulator — featured on Dragons' Den, G4TV, and WIRED and winning DJ Mag's Innovative Product of the Year in 2011. His 10-year-old daughter, Abi, invented sandals that leave a heart-shaped tan line on your feet called Love Sandal.Abi has been featured in Inc. and won Top 20 Under 20 at only 10 years old. Not to be outdone, his wife and co-founder, Julie, also runs XR Women, the world's largest xr industry meetup for women.

Alan is also an independent global advisor on the Metaverse for SXSW, Fortune 500 Companies and UHNW Family Offices, recently featured at Ritossa Summit, Riyadh.



HOW ETHEREUM MERGE WILL CHANGE THE CRYPTO MARKET

ADELLO'S FOCUS OF THE WEEK

Recently, the cryptocurrency market witnessed a critical event that would change the whole industry. Ethereum declared the merge of the blockchain platform network.

"And we finalized!... Happy merge, all. This is a big moment for the Ethereum ecosystem,"

Vitalik Buterin, Ethereum creator, confirmed on his Twitter.

The developers claim that this move will allow the entire system to spend 99% less electricity and generally run faster. This new algorithm no longer needs tens or hundreds of video cards. This update would be especially relevant in the current situation with the energy crisis and global warming issue.











THE MERGE OF TECHNOLOGIES

The Ethereum team has repeatedly claimed that the platform is actively growing and developing. Transactions are getting larger and constantly need to be confirmed. The network is becoming slow and requires high electricity costs.

Previously, ETH has been mined by using video cards. The main Ethereum blockchain has been running on PoW (Proof-of-work) since its launch in 2015. Ethereum's technical problem on PoW was that the transaction speed limit was frozen at 15 transactions per second. This is not a good indicator, as traditional systems work much faster. For instance, Visa processes 1,700 transactions at the same time.

In 2020 developers created a new blockchain called Beacon Chain with PoS technology (Proof-of-Stake). Theoretically, PoS will help Ethereum to speed up to 100 thousand transactions per second. Also, the new algorithm looks safer at the architecture level. It has both technical and organizational preventive measures. Now the systems PoW and PoS have been merged. Transactions are confirmed without solving mathematical problems on miners' video cards. Ethereum has moved to data validation via virtual voting.

#	Name	Price	1h %	24h %	7d %	Market Cap	Volume(24h)	Circulating Supply	Last 7 Days
☆ 1	 Bitcoin BTC	\$19,530.74	▲0.29%	▲0.91%	▲1.21%	\$373,492,267,676	\$39,183,393,045 2,010,568 BTC	19,164,537 BTC	
☆ 2	 Ethereum ETH	\$1,339.78	▲0.54%	▲1.35%	▼0.02%	\$163,835,281,641	\$13,538,144,224 10,129,741 ETH	122,587,625 ETH	
☆ 3	 Tether USDT	\$1.00	▼0.00%	▲0.01%	▲0.00%	\$67,957,570,850	\$50,917,465,029 50,916,442,974 USDT	67,956,206,753 USDT	
☆ 4	 USD Coin USDC	\$1.00	▲0.01%	▲0.01%	▼0.00%	\$47,670,932,138	\$4,066,182,561 4,065,867,877 USDC	47,667,242,861 USDC	
☆ 5	 BNB BNB	\$284.97	▲0.41%	▲1.22%	▲3.09%	\$45,907,140,804	\$777,832,966 2,733,637 BNB	161,337,261 BNB	
☆ 6	 XRP XRP	\$0.4894	▲0.08%	▲11.97%	▼9.57%	\$24,378,451,439	\$4,122,428,573 8,438,269,088 XRP	49,900,666,456 XRP	
☆ 7	 Binance USD BUSD	\$1.00	▲0.02%	▲0.11%	▲0.06%	\$21,046,545,712	\$6,629,518,074 6,628,158,535 BUSD	21,042,229,623 BUSD	
☆ 8	 Cardano ADA	\$0.437	▲0.05%	▲1.33%	▼6.59%	\$14,944,372,299	\$533,662,047 1,222,764,191 ADA	34,241,601,782 ADA	
☆ 9	 Solana SOL	\$34.11	▲0.29%	▲2.45%	▲3.86%	\$12,105,758,585	\$972,050,839 28,498,316 SOL	354,913,265 SOL	
☆ 10	 Dogecoin DOGE Buy	\$0.06086	▲0.26%	▲0.72%	▼1.26%	\$8,069,654,102	\$227,993,316 3,748,369,764 DOGE	132,670,764,300 DOGE	
☆ 11	 Polkadot DOT	\$6.45	▲0.22%	▲1.00%	▼1.08%	\$7,228,017,985	\$271,279,201 42,096,405 DOT	1,121,625,149 DOT	
☆ 12	 Dai DAI	\$1.00	▲0.03%	▲0.09%	▲0.02%	\$6,871,393,119	\$421,179,555 421,055,551 DAI	6,869,370,049 DAI	

WHAT DO MINERS DO WITH VIDEO CARDS NOW?

Talks about the feasibility of mining with video cards have been going on for years. The global semiconductor crisis inflated the prices of components, and the number of disillusioned miners increased. People invested money but did not get the expected profit. Rising energy prices made it even worse: Most video cards will pay for themselves in 20 years at best. Thus, today, video card mining is only profitable with free electricity.

Obviously, miners can redirect their power to alternative coins like Monero, Ravencoin or Ethereum Classic (it works on PoW). Bitcoin is not going anywhere, but the former accessibility of earnings is a thing of the past. Now miners have to decide whether to sell their crypto and wait for some other coin to take off or explore new areas of business.

ENVIRONMENT AFFECTION

As we know, cryptocurrencies affect the environment in quite a negative way. It takes a lot of energy to mine, especially Bitcoin. In addition, it requires a lot of energy to buy and sell cryptocurrency. This year it took at highest 204 TWh and 70.92 Mt CO₂ emission, generally only for Bitcoin! Researchers estimate that the Ethereum network consumes 23 million megawatt hours of energy per year. The platform developers compare the network's total annual electricity consumption to an entire country, namely Uzbekistan. At times when the problem of global warming is very acute, cryptocurrency creators must be concerned about their environmental impact.

The ETH Merge environmental aspect is an especially strong highlight by developers and journalists. Theoretically, switching to PoS would reduce electricity costs by 99.95 percent to 2,600-megawatt hours. Also, the total carbon footprint should decrease from 11 million tons per year to 870 tons.

Nevertheless, all "green" efforts of Ethereum will become irrelevant if someone comes up with a full-fledged analog to ETH in the near future. Then people will return back to mine the new (or refined old) coin again, disregarding the environmental damage.



Ethereum ETH

📧 🐦 f in

\$1,328.74

USD ▾

Buy / Sell ▾

24H % **▲ 2.56%**

24H Low **\$1,294.02**

24H High **\$1,354.92**



As of 29.09.2022 14:00

HOW THE ETH MERGE WILL AFFECT THE WHOLE WORLD

On the one hand, Vitalik Buterin and his partners are pioneers in many areas of the crypto world. On the other hand, they haven't done anything supernatural yet. PoS is new to Ethereum, but the algorithm itself has been around for a long time. Cardano blockchain and its ADA coin, for example, run on PoS. Both of these platforms and the coin are much less popular, so comparing the projects is not quite correct. It is also worth waiting for the market reaction to the disappearance of thousands of miners and the appearance of hundreds of validators.

There is also a lot of skepticism regarding the merge. The main concern is that this innovation may be an attempt to centralize one of the most popular cryptocurrencies. There is a fear that this is how the "51% vulnerability" will manifest itself, with the most affluent investors taking control of the currency. At the time, roughly two-thirds of the coins were owned by five large financial and crypto businesses, and 52% of Ethereum's infrastructure resided in Amazon's cloud services.

Another concern is the functionality of the new PoW system. Al Morris, a co-founder of Web3 company Koii Network, shared:

"One question which remains is whether the new Stake-based model will attract as many node operators, since tokens must be purchased before they can be staked as collateral, rather than simply burning energy as was normal under Proof-of-Work."

The Ethereum project has twice been rejected by teams that saw Buterin's innovation as a violation of development principles. Now investors and miners are taking a closer look. Ethereum's creators are looking for "basically letting us create a simulated universe that has its own laws of physics."

We will observe how such a technological shift of Ethereum will affect the crypto market as well as the world. It may happen that other large cryptocurrencies will follow this trend in response to the energy crisis around the world.

FORTNITE: PARADISE CHAPTER 3, SEASON 4

BY EXSCALIBUR

The 4th Season of Chapter 3 in Fortnite has finally begun! Today, we will tell you what are the updates, what is new and what the players should expect.

CHROME

The main modification of this battle royale game edition is Chrome, a mysterious liquid substance that intends to consume or change everything it touches. You won't believe it, but you can splash it on any object to get fire immunity or gain speed. Yes, that's right, a Chrome Splash is here to rescue! If you are tired of enemies hiding in the endless rows of buildings, make a Chrome Splash against the wall and get in!

Or, if you urgently need to run away and revive your allies, a Chrome Splash will make you invulnerable, moving faster, jumping higher, and taking no damage from falling. On top of that, if you collide with a surface, you turn it into Chrome. Chrome is everywhere, and weapons are no exception. Now you can find EvoChrome Shotgun and EvoChrome Burst Rifle, which increase their rarity from the damage death.





@esports.ch

VERTICAL GAMEPLAY

Killed from above? Don't get upset, it's not a cheater and not a construction worker - it's vertical gameplay! This season includes new locations, like a floating condo that

you can climb with the D-Launcher, which can be found everywhere, and other locations that have obviously been Chromified.

MORE UPDATES

In addition, there is a new kind of vault, which can be opened by finding multiple keys located throughout the Island, giving players access to high-level loot. You will need one key for Low-Security Vaults, and two for the High-Security Vaults.

The weapons from Chapter 3, Season 3: Vibin' are now available. Sniper rifles have received significant enhancements, increasing both damage and headshot multipliers.

Oh, don't forget about the best update is here: What's better than a pocket ally? A Port-A-Bunker! Now if you are caught in a vise, you can use the Port-A-Bunker to defend yourself, heal yourself and just collect your thoughts and prepare a plan.

That's it, no more spoilers from me, enjoy the game!



Adello

Adello Group AG.

Forchstrasse 32 8008
Zürich Switzerland
sales@adello.com
+41- 44 50031 50

Adello Malaysia Sdn. Bhd.

Penthouse, Centrepoint South,
The Boulevard
Mid Valley City 59200
Kuala Lumpur, Malaysia

Adello Inc.

548 Market St,
Suite 33114
San Francisco
CA 94104, USA